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## 10 Claims

1. A simulation system for computer-implemented  
simulation and verification of a control system under  
15 development, the simulation system comprising a  
generic model animation and in-model calibration  
interface, which uses measurement and calibration  
technologies with a host-target architecture, whereby  
the host contains at least one respective modelling  
20 tool and on the target software of the control system  
is executed.
2. A simulation system according to claim 1, comprising a  
target server to connect the modelling tool with the  
25 target.
3. A simulation system according to claim 2, whereby the  
target server contains a protocol driver of a  
communication protocol used for communication with the  
30 target.
4. A simulation system according to claim 1, comprising a  
plurality of simulation processes with corresponding  
memory and interface modules, which modules comprise

distinct memory locations for inter-module communication.

- 5 5. A simulation system according to claim 4, wherein simulation is performed by running a control system simulation model, the simulation model comprising a number of sub-models being performed on one of the plurality of modules, respectively.
- 10 6. A simulation system according to claim 4, wherein at least some of the modules are dynamically reconfigurable for communication via distinct memory locations.
- 15 7. A host of a simulation system for computer-implemented simulation and verification of a control system under development, the host comprising a generic model animation and in-model calibration interface, which uses measurement and calibration technologies for a  
20 host-target architecture, whereby the host contains at least one respective modelling tool and a target server to connect the modelling tool with the target.
- 25 8. A computer-implemented method for simulating and verifying a control system under development by means of a simulation system according to claim 1.
- 30 9. A computer program with program coding means which are suitable for carrying out a method according to claim 7, when the computer program is run on a computer.
10. A computer program product with a computer-readable medium and a computer program according to claim 7 stored on the computer-readable medium.